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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: PRABHAKARAN *et al*	Art Unit: 2857
Appl. No.: 10/708,800	Examiner: Assouad, Patrick J
Filed: March 26, 2004	Atty. Docket: H0005591
For: Potentiometer Providing a High Resolution	

Declaration Under 37 CFR 1.131

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

We, Joy P Prabhakaran and Jayaram B Srinivasmurthy, declare as follows:

1. We are the co-inventors of claims 1-13 examined in the Office Action Mailed on June 20 2003, in the above-identified patent application.

2. Attached hereto are Exhibits A and B, which demonstrate the conception and reduction of at least claims 1-5 and 8-11 on a day prior to June 12 2003, as explained below. The dates and other details (in the exhibits), believed not to be relevant, are whited out or removed.

3. Exhibit A contains a sequence of electronic mails (Emails) in chronological order (from bottom to top of Exhibit A): (E1) from Mr. VasanthKumar SubbeGowda to protomlb@yahoo.co.in, sending a carbon copy to prototech@vsnl.net, Mr. Ramesh Lingaiah Mr. Jayaram Srinivasmurthy and Mr. Joy Prabhakaran; (E2) from PROTOTECH (Bangalore) to VasanthKumar, SubbeGowda and protomlb@yahoo.co.in, sending a carbon copy to Mr. Ramesh Lingaiah (IE10), Mr. Jayaram Srlnivasmurthy (IE10) and Mr. Joy Prabhakaran, and signed by M.Rajaramrao for PROTOTECH; (E3) From Mr. VasanthKumar SubbeGowda to PROTOTECH(Bangalore), Mr. VasanthKumar SubbeGowda and protomlb@yahoo.co.in, sending a carbon copy to Mr. Ramesh Lingaiah, Mr. Jayaram

Srinivasmurthy (IE10) and Mr. Joy Prabhakaran; and (E4) From Mr. Ramesh Lingaiah to B. Raghavendra, sending a carbon copy to Mr. VasanthKumar SubbeGowda.

4. All the emails of Exhibit A were sent prior to June 12 2003.

5. Email E1 confirms that a 'Gerber' (explained below), prepared under our direction, was sent to Mr. Rajaram (also referred to as M. Rajaramrao in the remaining emails) of PROTECH on a day prior to June 12 2003.

6. Gerber refers to an electronic file which contains the specifications (including, components and connectivity) of a printed circuit board (PCB) to be fabricated. Gerber files can be generated using various Computer Aided Design (CAD) tools.

7. Mr. VasanthKumar SubbeGowda, an employee of Honeywell International (India) Pvt. Ltd, prepared the Gerber under our direction on a day prior to June 12 2003.

8. The specifications of the Gerber (referred in Exhibit A) contained at least the concepts underlying claims 1-5 and 8-11.

9. PROTOTECH provides the service of fabricating PCBs from the corresponding Gerber files.

10. Email E2 confirms that PROTOTECH received the GERBER and provided a price quotation.

11. Email E3 from Mr. DS Vasanthakumar confirms that PROTOTECH was authorized to fabricate the requested PCB (on a day prior to June 12 2003).

12. On a day prior to June 12 2003, we received the ordered product from PROTOTECH.

13. Prior to June 12 2003, we conducted tests on the received product, a portion of the report of which is appended hereto as Exhibit B.

14. The specification of the Gerber noted above contained two potentiometers ("parallel potentiometers") connected in parallel, and the combination of parallel potentiometers was connected in series with a third potentiometer. Each of three

potentiometers corresponded to Part Number AD8403 available from Analog Devices Inc., having an address at One Technology Way, P.O. Box 9106, Norwood, MA 02062-9106, U.S.A., Telephone Number: 781/329-4700. Thus, the tests corresponding to Exhibit B were performed with such a configuration.

15. Exhibit B contains various columns under INPUT and OUTPUT, and several rows with each row representing a test case.

16. Under INPUT of Exhibit B, the ideal resistance values expected to be offered by the two parallel potentiometers are indicated by the columns under R1 and R2 respectively. Under each of R1 and R2, there are two columns entitled code and value. Code refers to an input value provided to control the corresponding resistance value, and 'value' represents the 'ideal resistance value' assuming the corresponding potentiometer provides increased resistance values of equal steps in response to increase in the code values.

17. The three potentiometers did not offer increments in equal step sizes and this was as per the specifications provided by the manufacturer. Column Rm in the OUTPUT section indicates the measured resistance value of the third potentiometer noted above for each test case. The resistance value was measured using a multi-meter.

18. The three potentiometers were from the same vendor having the same product specification, and it is thus believed that all the three potentiometers operated substantially similarly. Thus, the actual resistance values offered by each of the two parallel potentiometers in each test case, is believed to equal the corresponding value in the column Rm.

19. Column Rp represents the effective resistance of the two parallel potentiometers, as measured by a multi-meter. Since the two resistance values R1 and R2 have been chosen to be equal, the values in column Rp need to ideally equal half the value in column Rm, which is observed to be the case within tolerable error levels for this embodiment/purpose.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under

Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

September 01 2005

Joy P Prabhakaran

September 01 2005

Jayaram B Srinivasmurthy

Application Serial No.: 10/708,800
Exhibit A
Redacted

From: Ramesh, Lingaiah (IE10)
Sent:
To: Raghavendra, B (Work Environment & Admin.) (IE10)
Cc: VasanthKumar, SubbeGowda (IE10)
Subject: PO on "Prototech"

Raghu,
Pl release the PO on "Prototech" for the below mentioned part no asap. The quotation is attached herewith for your reference.

regards,
Ramesh

-----Original Message-----
From: VasanthKumar, SubbeGowda (IE10)
Sent:
To: PROTOTECH(Bangalore); VasanthKumar, SubbeGowda (IE10); protomlb@yahoo.co.in
Cc: Ramesh, Lingaiah (IE10); Jayaram, Srinivasmurthy (IE10); Joy, Prabhakaran (IE10)
Subject: RE: AWAITING CLEARENCE.

Dear Sir,

Thanks for the offer you have made , You can proceed with the manufacturing of PCB's . Take this as a E -Mail confirmation.
You can be in touch with Ramesh Lingaiah for the PO .

We would like to have Standard Quotation for 4 layer , 6 layer and 10 layer card.

Ramesh : Please arrange for the PO.

Thanks and Regards

Vasanth Kumar D S
Honeywell
Honeywell Technology Solutions Lab
191/1, Doraisanipalya, Bannerghatta Road
Bangalore - 560076, INDIA
Email Id : **vasanth.ds@honeywell.com**
Fax : **91 - 80 - 6584750**
Phone : **6588360 / 51197222 /51109900**
Extn : **2221**

-----Original Message-----
From: PROTOTECH(Bangalore) [SMTP:prototech@vsnl.net]
Sent:
To: VasanthKumar, SubbeGowda (IE10); protomlb@yahoo.co.in
Cc: Ramesh, Lingaiah (IE10); Jayaram, Srinivasmurthy (IE10); Joy, Prabhakaran (IE10)
Subject: Re: AWAITING CLEARENCE.

Dear Sirs,

Refer to your mail and Received Gerber for the below mentioned type.

Application Serial No.: 10/708,800
Exhibit A
Redacted

We are gratefull to give our BEST OFFER.

Ref No: PROTO/MKTG/193/2002-2003
DATE :

BOARD REF :999-221-003-08-AOO
BOARD TYPE :2 LAYERS
BOARD THICKNESS :1.6 mm, 35 Microns
BOARD DESCRIPTION :95.85 X 189.69 mm
TAB CONNECTORS : 98 No.s PER P.C.B
QNTY : 10 No.s

P.C.B RATES, DELIVERY 4 WORKING DAYS

INITIAL DEVELOPMENT CHARGES (NRSC) FOR NEW JOBS
INCLUSIVE OF PHOTO PLOTTING CHARGES & TAB CONNECTOR CHARGES.

TERMS & CONDITIONS

Trust that the above offer is acceptable & we look forward for your kind confirmation at the earliest for the above mentioned Valued Order.

Thanking you & Assuring you of our BEST SERVICES all times.

Your's faithfully

M.Rajaramrao
For PROTOTECH.

---- Original Message ----
From: VasanthKumar, SubbeGowda (IE10) < Vasanth.DS@honeywell.com <mailto:Vasanth.DS@honeywell.com>>
To: < protomlb@yahoo.co.in <mailto:protomlb@yahoo.co.in>>
Cc: < prototech@vsnl.net <mailto:prototech@vsnl.net>>; Ramesh, Lingaiah (IE10) < Ramesh.Lingaiah@honeywell.com <mailto:Ramesh.Lingaiah@honeywell.com>>; Jayaram, Srinivasmurthy (IE10) < Jayaram.Srinivasmurthy@honeywell.com <mailto:Jayaram.Srinivasmurthy@honeywell.com>>; Joy, Prabhakaran (IE10) < Joy.Prabhakaran@honeywell.com <mailto:Joy.Prabhakaran@honeywell.com>>
Sent:
Subject: Gerber of two layer card from Honeywell partno.999-221-003-08 a00

Application Serial No.: 10/708,800
Exhibit A
Redacted

>
> Hello Mr. Rajaram /Sridhar
>
> Please find the attached Gerber for Manufacturing,
> Part no 999-221-003-08 A00 ,
> In case of any issues call me back .
>
> Ramesh : Please follow it up for quotation and PO
>
> Thanks and Regards
> Vasanth
>
>
>
>
> Vasanth Kumar D S
> _____Honeywell
> Honeywell Technolgy Solutions Lab
> 151/1, Doraisanipalya, Bannerghatta Road
> Bangalore - 560076, INDIA
> Email Id : vasanth.ds@honeywell.com <mailto:vasanth.ds@honeywell.com>
> Fax : 91 - 80 - 6584750
> Phone : 6588360 / 51197222 /51109900
> Extn : 2221
>
>

Application Serial No.: 10/708,800
Exhibit B
Redacted

INPUT				OUTPUT		
R1		R2		Rm	Rp	
CODE	VALUE	CODE	VALUE			
0	40	0	40	41.2	20.7	
1	43.9	1	43.9	47.6	23.8	
2	47.8	2	47.8	51.6	25.4	
3	51.7	3	51.7	56.2	28.1	
4	55.6	4	55.6	59.8	29.5	
10	106.3	10	106.3	107.9	53.4	
11	110.2	11	110.2	114.9	56.9	
30	231.1	30	231.1	240.9	119.4	
31	235	31	235	247.3	122.7	
50	355.9	50	355.9	373.2	185.3	
51	359.8	51	359.8	380	188.7	
80	543.1	80	543.1	574	284.2	
81	547	81	547	582	286.5	
A0	667.9	A0	667.9	710	352	
A1	671.8	A1	671.8	716	356	
C0	792.7	C0	792.7	844	418	
C1	796.6	C1	796.6	851	422	
E0	917.5	E0	917.5	978	484	
E1	921.4	E1	921.4	984	488	
F0	979.9	F0	979.9	1039	514	
F1	983.8	F1	983.8	1048	520	
FA	1018.9	FA	1018.9	1086	539	
FA	1022.8	FB	1022.8	1092	542	
FC	1026.7	FC	1026.7	1095	542	
FD	1030.6	FD	1030.6	1100	545	
FE	1034.5	FE	1034.5	1102	551.3	
FF	1038.4	FF	1038.4	1108	550	